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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,515

02/13/2006

Kyra Mollmann

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EXAMINER

MOONEY, MICHAEL P

ART UNIT

PAPER NUMBER

2883

MAIL DATE

DELIVERY MODE

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,515	Applicant(s) MOLLMANN, KYRA	
	Examiner Michael P. Mooney	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/13/06, 2/13/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Drawings***

Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) [e.g., figure 3] and further in view of Ludington et al. (5444236).

Applicant states, at paragraph 0033 of the PG PUB of the instant application (IA) [see US 20060165359], that figure 3 of IA represents the prior art. Furthermore, said paragraph 0033 also states that said figure 3 illustrates a problem of the prior art, i.e., that light from the red spectral range is disadvantageously focused while light from the blue spectral range is properly collimated.

When presented with the above said problem, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize conventionally known lens/optics-designing method(s) to produce lens/optics to correct the said problem. The fact that solving the said problem, i.e., designing/making optics that produce collimated red light as well as collimated blue light, is conventionally known in the art is illustrated by Ludington et al. reference. E.g., at fig. 1, Ludington et al. clearly shows optics processing beams of different bands at different respective focal lengths. The fact that the lens 10 of Ludington et al. is processing beams from a collimated state to a focused state is irrelevant because the inherent reciprocal nature of the optics also allows for processing beams from focused state to a collimated state.

Therefore, there is no inventive step involved in solving the aforesaid problem of the red spectral range being disadvantageously focused since, as clearly illustrated above, it would be obvious for the skilled artisan to design optics/lens that can also

Art Unit: 2883

collimate the red beam along with collimating the blue beam exiting a microstructured optical fiber.

AAPA and Ludington et al. are combined by taking the technology of AAPA which teaches a red-band and blue-band producing microstructured optical fiber in an arrangement that properly collimates the blue band but disadvantageously focuses the red band and applying it to the optics/lens-for-producing-collimated-beams-for-both-red-and-blue-bands technology inherent to Ludington et al. to obtain the instant invention of a red-band and blue-band producing microstructured optical fiber in an arrangement that properly collimates both the blue band and the red band. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make such a combination for the purpose of providing properly collimated light in both the red and blue bands.

One of ordinary skill would have been motivated to produce such an arrangement for the purpose of producing a better quality illumination beam.

Therefore, by the reasons/references given above each and every element of claim 1 is rendered as obvious. Thus claim 1 is rejected.

Regarding claims 2-20, by the reasons and references given above and/or conventionally known principles in the art, each and every element of each of claims 2-20 is rendered as obvious to one of ordinary skill in the art. Thus claims 2-20 are rejected.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Soskind (6462874), Johnson (5161057), Weinstein et al. (20040101210), Takeuchi (20040037204), Barty (20030218795), and Chalmers et al. (20050174584) teach optics arrangements for dispersion compensation. Birk et al. teaches using a microstructured optical fiber in an arrangement that produces spectrally broadened light.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2883

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael P. Mooney
Examiner
Art Unit 2883



Frank G. Font
Supervisory Patent Examiner
Art Unit 2883

FGF/mpm
6/2/07